

**ARIZONA GAME AND FISH DEPARTMENT  
HERITAGE DATA MANAGEMENT SYSTEM**

**Plant Abstract**

**Element Code:** PDFAB3N020

**Data Sensitivity:** No

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Sophora arizonica*

**COMMON NAME:** Arizona Necklace, Arizona Mescal Bean

**SYNONYMS:** *Sophora formosa* Kearney and Peebles; *Calia arizonica* (Wats.) Yakovl.;  
*Calia formosa* (Kearney and Peebles) Yakovl.

**FAMILY:** Leguminosae

**AUTHOR, PLACE OF PUBLICATION:** Watson, S. 1876. Proc. Amer. Acad. 11:121-148.

**TYPE LOCALITY:** Arizona: White Cliff Creek and Cactus Pass (J.M. Bigelow in 1854).

**TAXONOMIC UNIQUENESS:**

**DESCRIPTION:** Unarmed evergreen shrub up to 3 m (10 feet) high. Leaves pinnately compound with 3-12 coriaceous, evergreen leaflets. Inflorescence a dense terminal raceme of white to lilac, pea-flowered with a corolla up to an inch long. Fruit flattened legume slightly constricted between reddish and brown seeds.

**AIDS TO IDENTIFICATION:** Most readily distinguished from *Sophora formosa* by the larger flowers, about 22 mm (7/8 inch) long (Benson and Darrow 1981).

**ILLUSTRATIONS:**

**TOTAL RANGE:** West-central to southeastern Arizona.

**RANGE WITHIN ARIZONA:** Mohave County: 8 populations. In Aquarius, Cottonwood and Hualapai mountains. Graham County: 4 populations in Pinaleno Mountains. Cochise County: 2 populations in Whetstone Mountains and 1 population in Swisshelm Mountains.

**SPECIES BIOLOGY AND POPULATION TRENDS**

**GROWTH FORM:** Woody Perennial

**PHENOLOGY:** Mid-February to April

**BIOLOGY:**

**HABITAT:**

**ELEVATION:** 2,000 to 4,000 feet (610 - 1,220 m).

**EXPOSURE:**

**SUBSTRATE:** Alluvium to basalt, granite, limestone, and gypsum.

**PLANT COMMUNITY:** Desert-grassland to pinyon-juniper woodland.

**POPULATION TRENDS:****SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:** None (USDI, FWS 1996)  
[Category 3C, USDI, FWS 1985]  
[Category 2, USDI, FWS 1980 ]

**STATE STATUS:**

**OTHER STATUS:** Forest Service Sensitive (USDA, FS Region 3, 1990)

**MANAGEMENT FACTORS:****PROTECTIVE MEASURES:****SUGGESTED PROJECTS:****LAND MANAGEMENT/OWNERSHIP:****SOURCES OF FURTHER INFORMATION****LITERATURE CITATIONS:**

- Benson, L. and R.A. Darrow. 1981. Trees and Shrubs of the Southwest Deserts. University of Arizona Press, Tucson. p. 255.
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- McManus, R. The taxonomy of the shrubby Sophoras of Arizona. Unpublished Master's Thesis, University of Arizona, Tucson.
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- Watson, S. 1876. Proc. of Amer. Aca. Arts and Sci. 11:121-148.

**MAJOR KNOWLEDGEABLE INDIVIDUALS:**

- S. Bingham - Eastern Arizona College, Thatcher.
- M. Butterwick - EPA Sacramento California, (formerly BLM Phoenix District).
- R. McManus - Washington D.C.
- D.K. Northington - Texas Tech. University, Lubbock.
- A.M. Phillips - Flagstaff, Arizona.
- T.R. VanDevender - Arizona-Sonora Desert Museum, Tucson, Arizona.

**ADDITIONAL INFORMATION:**

- R. McManus: Demonstrated *S. arizonica* and *S. formosa* are conspecific.

**Revised:** 1981-xx-xx (ANHP)  
1991-10-20 (BKP)  
1998-01-09 (SSS)

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